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CULTIVATION OF SOURSOP (*Annona muricata* L.)

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Introduction

The soursop (*Annona muricata* L.) is a tropical fruit grown in the Bahamas whose popularity has been recently enhanced by the medicinal and anti-cancer properties. It is not grown on a commercial scale, due to its low fruit production per plant and cultivation is usually confined to backyard gardens and small holdings.

Propagation

Propagation of the soursop is usually through seeds, but it can be propagated through grafting and air layering (mossing) techniques. Seeds usually germinate in 15-30 days. The seeds should be sown in seed trays or small containers and kept moist and in a shaded area. Plant the propagated seedlings in the ground when the plants are about one foot in height. The plants must be watered during dry periods. For ease of harvest, trees can be pruned before flowering and fruiting. A medium-sized tree can measure up to thirty feet in height. The soursop is a rapidly growing tree which bears in three to five years. The fruiting season extends from June to October, but fruit can be harvested throughout the year.



Soil

Best growth is achieved in deep, rich, well-drained, semi-dry soil, but the soursop tree can be and is commonly grown in sandy soil, and in the porous, oolitic limestone of the Bahamas. The limestone soils tend to be strongly alkaline, in the range of 7.9 to 8.3 pH. Organic material such as degraded vegetation, humus and animal manures need to be added to reduce the pH and enrich the soil.

Irrigation

It is recommended to water newly transplanted seedlings. The plants should be watered regularly, especially during the dry periods of the year. During the rainy seasons, heavy downpours adversely affect the pollination of flowers and production of fruit.

Fertilisers

The soursop tree requires fertilising to maintain a healthy, vigorous plant. A commercial N-P-K fertiliser, such 8-18-8, should be applied about three or four times per year at a rate of 2-3 pounds per plant. The granular fertiliser should be worked into the soil around the root zone of the plant and watered. Cured animal manure may be used as fertiliser, but one must be careful of too much nitrogen as this may result in the growth of lush foliage at the expense of flowering and fruiting.

Weed Control

The area surrounding the soursop plant should be kept free of weeds, which compete for soil nutrients and water. Weed competition results in stunted growth of the soursop plant.

Insect Pests and Diseases

Some common insect pest problems plaguing the soursop include mealy bugs, root grubs, carpenter moth larva, and scale insects. Commercial insecticides can be applied, but care must be taken not to kill off beneficial insects during pollination of flowers. Homemade pesticide remedies such as a cup vegetable oil in a gallon of water can be used to suffocate small insects, insect larvae and eggs.

There are a number of diseases that can affect the growth and development of the soursop plant. Diseases attacking the leaves or roots can cut off the nutrient supply to the plant. Fungal diseases such as anthracnose, root rot and pink disease are among the common diseases of the soursop. Proper care and upkeep of the soursop tree is the best protection against disease problems. Spraying the tree with fungicides early in the season may prevent disease development.

Harvesting

The young fruit is dark green in colour and covered in soft spines. As it matures, the colour changes to a lime-green colour and the fruit appears to be puffy. The soursop fruit is harvested when fully matured and still firm. If allowed to ripen on the tree, it will fall to the ground and become squashed. The fruit takes about three to five days to ripen after picking.

Internet Resources

Tropical Fruit (<https://www.growables.org/information/TropicalFruit/annonamuricatanew.htm>)

Pest and Diseases that can Damage your Soursop Tree Are

(<https://www.tkofarms.com/blog/2017/12/14/pests-and-diseases-that-can-damage-your-soursop-tree-are>)